CLAIMS

What is claimed as being new and desired to be protected by LETTERS PATENT of the United States is as follows:

1. A laundry inventory management system for allowing a user to conveniently and efficiently select garments for transfer, comprising, in combination:

a structure having an electrical source and plurality of surfaces, the surfaces comprising a floor and a ceiling and a plurality of walls;

a garment on a hanger, the garment having an indicia coupled thereto;

a computer system having a program to store in memory and retrieve from memory inputted specific locations;

a pair of trolley rails fabricated of a rigid material and having a generally round hollow tubular configuration, each of the rails having an upper surface and a lower surface and an inner surface and an outer surface, with each of the rails having a plurality of rail supports to couple the rails to a surface of the structure;

a trolley being electronically coupled to the computer and electronically coupled to the electrical source, the trolley having a generally rectilinear configuration with a right end and a left end an upper surface and a lower surface and four edges there between, the edges comprising two pairs of parallel edges, the lower surface of the trolley having a shuttle track coupled

17

thereto, with the right and left end of the trolley having a
plurality of rail wheels to couple the trolley to the rails with
the rail wheels being rotated by an electrical motor to move the
trolley back and forth along the length of the rails;

a pneumatic power source;

a shuttle being electronically coupled to the computer and
electronically coupled to the electrical source, the shuttle
being coupled to the pneumatic power source with the shuttle
having a pneumatically operated dual-cylinder switch-back drive
for moving the shuttle back and forth along the length of the
shuttle track, the shuttle having an indicia reading means to
allow the trolley to move to an exact location along a rail with
the indicia reading means being coupled to the computer, the
shuttle having a pick-up gripper coupled there to, the gripper
having a pneumatically driven motor being coupled thereto and
powered by the pneumatic source, with the gripper being coupled
to the computer, the shuttle having a hanger spreader;

a electrical conductive means to couple the electrical
source and the trolley electrical motor, the conductive means
also coupling the shuttle and the electrical source; and

a computer program which enters a specific location of a
garment hanger and the program stores the location of the garment
hanger and the program can recall the location of the garment
with the program assigning a specific location as defined by a
specific indicia to each garment hanger location, the program

controlling the movement of the trolley to the specific indicia and then moving the shuttle in a direction to move to the specific location, with the gripper engaging the garment hanger at the specific location and the trolley then returning the garment hanger to an assigned location.

2.   A laundry inventory management system comprising, in combination:

a structure having an electrical source;

a computer system having a program to store data, the computer being coupled to the electrical source;

a pair of trolley rails with each of the rails having rail supports;

a trolley being coupled to the computer, the trolley having a shuttle track and a plurality of rail wheels and a motor;

a shuttle having a motor and a pick-up gripper, the shuttle and gripper being coupled to the computer;

a power source and a power means to drive the trolley motor and the shuttle motor and the pick-up gripper motor; and

a computer program to control the movement of trolley and of the shuttle and of the pick-up gripper.

3.   A laundry inventory management system as described in Claim 2 wherein the power source is electrical and the power means is electromotive.

4. A laundry inventory management system as described in Claim 2 wherein the power is compressed air and the power means is pneumatic.

5. A laundry inventory management system as described in Claim 2 wherein the system further includes indicia and an indicia reader.

6. A laundry inventory management system as described in Claim 2 wherein the indicia is a bar code.

7. A laundry inventory management system as described in Claim 2 wherein the indicia is a plurality of notches in the rail.

7. A laundry inventory management system as described in Claim 2 wherein the indicia is coupled to a garment.

8. A laundry inventory management system as described in Claim 2 wherein the trolley is driven by a stepper motor.

9. A laundry inventory management system as described in Claim 2 wherein the trolley is driven by a servo motor.

10. A method of laundry inventory management for allowing a user to conveniently and efficiently select garments for transfer, comprising, in combination:

providing a structure having an electrical source and plurality of surfaces, the surfaces comprising a floor and a ceiling and a plurality of walls to house the management system;

providing a garment on a hanger to be moved;

providing a computer system having a program to store in memory and retrieve from memory inputted specific locations to control the movement of the components of the management system;

providing a pair of trolley rails fabricated of a rigid material and having a plurality of rail supports to couple the rails to a surface of the structure, the rails aligned in a parallel manner;

providing a trolley being electronically coupled to the computer and electronically coupled to the electrical source, the trolley having a shuttle track coupled thereto, with the trolley having a plurality of motor driven rail wheels to couple the trolley to the rails;

providing a shuttle being electronically coupled to the computer and electronically coupled to the electrical source, the shuttle being coupled to the pneumatic power source with the shuttle having a pneumatically operated dual-cylinder switch-back drive, the shuttle having an indicia reading means, the shuttle having a pick-up gripper coupled there to, the gripper having an electrical motor being couple thereto and powered by the electrical source, with the gripper being coupled to the computer, the shuttle having a hanger spreader, the shuttle movement being controlled by the computer;

providing an electrical conductive means to couple the electrical source and the trolley electrical motor, the conductive means also coupling the shuttle and the electrical

21

source to provide power to the components of the management system; and

actuating the system under the control of a computer program which enters a specific indicia of a garment hanger and the program stores the location of the garment hanger and the program can recall the location of the garment with the program assigning a specific location as defined by a specific indicia to each garment hanger location, the program controlling the movement of the trolley to the specific indicia and then moving the shuttle in a direction to move to the specific location, with the gripper engaging the garment hanger at the specific location and the trolley then returning the garment hanger to an assigned location, whereby a user can direct the computer to find and retrieve a garment, and the trolley will move to the appropriate location, with the shuttle moving to pick up the garment with the pick-up gripper, and the trolley conveying the garment to a desired location.

11. An system for placing and retrieving garments on hangers comprising:

a trolley for placing or retrieving an item to a location;

a means of identifying the item;

a trolley for placing or retrieving an item to a location;

a computer program for storing information and controlling activity of the system.

12. A system as described in Claim 11 wherein the items comprise garments supported by hangers.

13. A system as described in Claim 11 wherein the means for identifying an item is a radio frequency chip.

14. A system as described in Claim 11 wherein the trolley comprises a pneumatically powered gripping mechanism.